

mechanistic theory, as e. g., the unity of the organism in its many manifestations, and the teleological self-guidance of so many of its functions.

Among speculations of this kind, we found R. S. Lillie's to be excepted from this general verdict; for its essence is to see in all matter a factor which is psychical rather than physical, and through the development of which the peculiarities of living things may have been evolved. It thus comes near to the theories of the hylozoist or holistic group which are non-dualistic, non-vitalistic and yet frankly recognize the intrinsic teleological and psychical activities of organisms.

Perhaps somewhat out of its true place in the course of the argument we then examined Goldschmidt's attempt at a purely chemical theory of morphogenesis. Failing to find any sure indication of spatial structure in the egg of the nature of preformation, he falls back on the assumption that the egg is just a bag of many chemical substances of very specialized constitution, suspended in a watery medium. Starting thus with a mixture of substances highly specific in chemical constitution but wholly lacking any specific spatial arrangement of those substances, he seeks to evolve all the spatial arrangements of the adult creature through the interplay of these chemical constituents. His hypothesis being that the process of development, issuing as it does in very complex and exact spatial arrangements, is determined by the different speeds of the different chemical processes, and these speeds in turn by different quantities of the parent or

germinal substances.

We were compelled to admire this resolute
facing of the
problem with its implied acknowledgement of
the absence
of all material preformation in spatial
terms; but also to